



Dart Aerospace Ltd.  
1270 Aberdeen St  
Hawkesbury, ON  
K6A 1K7  
Canada

Tel (613) 632-5200  
Fax 613 632-5246



D5815-9

Job Sheet 207568



POSITIVE RECALL

EFFECTIVE 3/13/20 AUTH. [Signature]

RELEASED DATE

Part No: D5815-9

Job Qty: 8 pcs

Part Name: Hoop



Part Weight: 0 lbs

Status: New

Priority: Medium

Job Created: 2/27/20

Job Tracking No:

Due Date: 4/27/20

Created By: Jennifer Renwick

Type: Stock

Description:

Note: URF 20-522 DWG 5815 REV.A IPP REV:A NEW ISSUE 20.01.16 JV VERF:DD

Ship Via:

## Bill of Materials

## Job Routing

| Op No | Operation                 | Qty   | Start Date | Due Date | Standard  |         | Workcenter/Supplier      |           | Sign-off |
|-------|---------------------------|-------|------------|----------|-----------|---------|--------------------------|-----------|----------|
|       |                           |       |            |          | Setup Hrs | Run Hrs | Workcenter / Supplier    | Lead Time |          |
| 100   | Large Fab - Welded Assy-1 | 8 pcs | 4/27/20    | 4/27/20  | 0.00      | 2.67    | Large Fab - 1            |           |          |
|       |                           |       |            |          |           |         | Large Fab - 10           |           |          |
|       |                           |       |            |          |           |         | Large Fab - 2            |           |          |
|       |                           |       |            |          |           |         | Large Fab - 3            |           |          |
|       |                           |       |            |          |           |         | Large Fab - 4            | DAS       |          |
|       |                           |       |            |          |           |         | Large Fab - 5            | 24        |          |
|       |                           |       |            |          |           |         | Large Fab - 6            | 9-89      |          |
|       |                           |       |            |          |           |         | Large Fab - 7            |           |          |
|       |                           |       |            |          |           |         | Large Fab - 8            |           |          |
|       |                           |       |            |          |           |         | Large Fab - 9            |           |          |
|       |                           |       |            |          |           |         | Large Fab - 11 (Various) |           |          |
|       |                           |       |            |          |           |         | Large Fab - 12           |           |          |
| 110   | QC 5                      | 8 pcs | 4/27/20    | 4/27/20  | 0.00      | 0.00    | QC 5 - 10                |           |          |
|       |                           |       |            |          |           |         | QC 5 - 12                |           |          |
|       |                           |       |            |          |           |         | QC 5 - 17                |           |          |
|       |                           |       |            |          |           |         | QC 5 - 18                |           |          |
|       |                           |       |            |          |           |         | QC 5 - 19                |           |          |
|       |                           |       |            |          |           |         | QC 5 - 22                |           |          |
|       |                           |       |            |          |           |         | QC 5 - 24                |           |          |
|       |                           |       |            |          |           |         | QC 5 - 3                 |           |          |
|       |                           |       |            |          |           |         | QC 5 - 43                |           |          |
|       |                           |       |            |          |           |         | QC 5 - 49                |           |          |
|       |                           |       |            |          |           |         | QC 5 - 51                |           |          |
|       |                           |       |            |          |           |         | QC 5 - 58                |           |          |
|       |                           |       |            |          |           |         | QC 5 - 68                |           |          |
|       |                           |       |            |          |           |         | QC 5 - 9                 |           |          |
|       |                           |       |            |          |           |         | QC 5 - 50                |           |          |
|       |                           |       |            |          |           |         | QC 5 - 30                |           |          |
|       |                           |       |            |          |           |         | QC 5 - 40                |           |          |
|       |                           |       |            |          |           |         | QC 5 - 61                |           |          |
|       |                           |       |            |          |           |         | QC 5 - 81                |           |          |
|       |                           |       |            |          |           |         |                          |           |          |
|       |                           |       |            |          |           |         |                          |           |          |



Container No: S264099



Part: D5815-9

Job No: 207568

Serial No/Batch: S264099

Revision: REV.A

Inspector:

Exp Date:

Instructions:

Dart Aerospace Ltd.  
1270 Aberdeen Street  
Hawkesbury, ON K6A 1K7  
CANADA  
TEL.: 1 613 632-5200  
Email: sales@dartaero.com  
www.dartaerospace.com

Date: 03/17/20

DAS

MAR 18 2020

40  
9-89

120 Packaging 3-1 - Stock - B4B 8 pcs

4/27/20

0.00 0.00

Packaging 3 - 1 - B4B

Packaging 3 - 2 - B4B

Packaging 3 - 3 - B4B

Packaging 3 - 4 - B4B

Packaging 3 - 5 - B4B

Packaging 3 - 6 - B4B

Packaging 3 - 7 - B4B

Packaging 3 - 8 - B4B

Packaging 3 - 9 - B4B

Packaging 3 - 10 - B4B

Packaging 3 - 11 - B4B

Packaging 3 - 12 - B4B

Packaging 3 - 13 - B4B

Packaging 3 - 14 - B4B

Packaging 3 - 15 - B4B

Packaging 3 - 16 - B4B

Packaging 3 - 17 - B4B

Packaging 3 - 18 - B4B

Packaging 3 - 19 - B4B

Packaging 3 - 20 - B4B

Packaging 3 - 21 - B4B

Packaging 3 - 22 - B4B

Packaging 3 - 23 - B4B

Packaging 3 - 24 - B4B

Packaging 3 - 25 - B4B

Packaging 3 - 26 - B4B

Packaging 3 - 27 - B4B

Packaging 3 - 28 - B4B

Packaging 3 - 29 - B4B

Packaging 3 - 30 - B4B

Packaging 3 - 31 - B4B

Packaging 3 - 32 - B4B

Packaging 3 - 33 - B4B

Packaging 3 - 34 - B4B

Packaging 3 - 35 - B4B

Packaging 3 - 36 - B4B

Packaging 3 - 37 - B4B

130 QC 21 - SA

8 pcs

4/27/20

0.00 0.00

QC 21 - SA - 21

QC 21 - SA - 70

QC 21 - SA - 53

MAR 19 2020

Part Op 100 - 1- Cut material to 58" 2- Bend and drill #30 vent hole as per D5815-9 dwg 3- Remove markings on tube 4- Deburr  
 Descriptions: 110 - (QC5- Inspect part completeness to step on W/O)  
 120 - Identify as per dwg & Stock Location:  
 130 - QC21- Final Inspection - Work Order Release

## Job BOM

| Part / Item        | Component Name                       | Quantity               | Operation                     | Container |
|--------------------|--------------------------------------|------------------------|-------------------------------|-----------|
| M4130NTS0.500W.035 | 4130 Square Tube .500 X .500 X .035W | 38.6664 ft (4.8333 ea) | 100-Large Fab - Welded Assy-1 | S260577   |

## Job Allocations

| Operation                     | Component Part     | Required | Inventory | Allocated |
|-------------------------------|--------------------|----------|-----------|-----------|
| 100-Large Fab - Welded Assy-1 | M4130NTS0.500W.035 | 39       | 577       | 0         |

## Part Specifications

Specifications could not be found.

M4130NTS0.500W.035  
 S260577

part.lajeunesse.marie

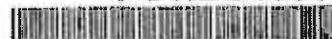




Dart Aerospace Ltd.  
1270 Aberdeen St  
Hawkesbury, ON  
K6A 1K7  
Canada

Tel (613) 632-5200

# PURCHASE ORDER POHB045883



**Supplier:** FAC001-VU  
Factory Steel  
14020 Oakland Ave.  
Detroit, MI 48203 USA  
Phone: 313 883 6300  
Fax: 313 883 4883

**Ship To:** 1270 Aberdeen Street  
Hawkesbury  
ON  
K6A 1K7 Canada  
Phone: 613-632-5200

**PO No:** POHB045883

**PO Date:** 2/18/20

**Due Date:** 2/28/20

**Purchase Order**

**Revision:**

**Revision Date:**

**Issued By:**

Lavoie, Chantal  
Phone: 613-623-5200 Ext: 242  
Fax: 613-632-1053  
clavoie@dartaero.com

**Via:**

Ground

**Pymt Terms:**

Net 30

**Freight Terms:**

**Special Comments:**

FEB 18 2020

## Items

| Line<br>Item            | Job | Part               | Drawing | Supplier<br>Part No | Description  | Status | Account | Due<br>Date | Order<br>Quantity | Received<br>Quantity | Balance | Unit<br>Price (USD) | Extended<br>Price |
|-------------------------|-----|--------------------|---------|---------------------|--|--------|---------|-------------|-------------------|----------------------|---------|---------------------|-------------------|
| 1                       |     | M4130NTS0.500W.035 |         |                     | 4130 Square Tube<br>.500 X .500 X .035W<br>MATERIAL: AISI<br>4130N STEEL<br>TUBING AS PER<br>MIL-T-6738 OR AMS<br>6371/6380/6361/6362<br>6373/6374<br>receive ft | Firmed | -       | 2/28/20     | 600 ft            | 0 ft                 | 600 ft  | \$6.49/ft           | \$3,894.00        |
| Grand Total: \$3,894.00 |     |                    |         |                     |  |        |         |             |                   |                      |         |                     |                   |

## Order Notes

### Procurement Quality Clauses

A005 right of entry

A012 chemical and physical test report

A016 personnel qualification

A017 raw material identification (as applicable). No Raw Metals from China or Soviet Bloc Countries. (DFARS)

A026 certification of material conformance

A041 quality management system

A042 dart notification by supplier

A043 retention of quality documents

A048 counterfeit parts avoidance, detection, mitigation and disposition program.

A049 supplier awareness.

Terms & Condition of Purchasing(Suppliers) and Procurement Quality Clauses are an integral part of our AS9100 requirements. To learn in detail, please visit [www.dartaerospace.com](http://www.dartaerospace.com) for further explanation.

Plex 2/19/20 2:52 PM Dart.Lavoie.Chantal

# PACKING LIST

No. 67811

PG 1 OF 1

|   |   |                          |   |                           |
|---|---|--------------------------|---|---------------------------|
| FACTORY STEEL & METAL SUPPLY<br>14020 OAKLAND AVENUE<br>DETROIT, MI 48203<br><br>(313)883-6300 PHONE<br>(313)883-4883 FAX | CUSTOMER PO<br>POHB045883   |                          | BUYER<br>CHANTEL LAVOIE<br>Tel (613) 632-3336<br>Fax (613) 632-4443 | SHIP DATE<br>02/21/2020   |
|   | CUSTOMER JOB  |                          | SALES REP<br>MICK HALON   | SHIP VIA<br>****TRUCK**** |
| SOLD TO<br>DART AEROSPACE<br>1270 ABERDEEN STREET<br>HAWKESBURY, ON K6A 1K7   | SALES ORDER<br>60752  | ORDER DATE<br>02/19/2020 | SHIP INST<br>CALL WHEN READY<br>PRO#                                | RESALE #<br>59-2958719    |
|   | SHIP TO<br>DART AEROSPACE<br>1270 ABERDEEN STREET<br>HAWKESBURY, ON K6A 1K7 |                          | TERMS<br>NET 30 DAYS  | CARRIER<br>TRUCK          |
|   |   |                          |   | BLIND Y/N<br>N            |
|   |   |                          | FOB<br>DETROIT  |                           |

| LINE | QUANTITY   | DESCRIPTION   | WIDTH                         | LENGTH       | WEIGHT  |                 |                   |
|------|------------|---|-------------------------------|--------------|---------|-----------------|-------------------|
| 1    | 611.667 FT | PACK IN CARDBOARD TUBE<br>4130N CD SMLSS SQ TUBE 1/2" X .035W HILT-6736<br>Tag M111 Ref # Heat<br>154506 023914 25537<br>MTRS (CIRCLE) FAX SHIPMENT INVOICE ALL<br>DATE: INITIAL: | Pcs Length<br>27 21' / 24' RL | 21' / 24' RL | 135.361 | Feet<br>611.667 | Weight<br>135.361 |

|                     |                         |                            |               |
|---------------------|-------------------------|----------------------------|---------------|
| TOTAL WT<br>135 LBS | RECEIVED BY - SIGNATURE | RECEIVED BY - PRINTED NAME | DATE RECEIVED |
|---------------------|-------------------------|----------------------------|---------------|

# MATERIAL RECEIPT INSPECTION FORM

MATERIAL: M4130NT50.520W.035 PO / BATCH NO.: P049045803  
 DATE: MAR 04 2020 5260577

MATERIAL CERT REC'D: YES  
 QUANTITY RECEIVED: 611 FT  
 QUANTITY INSPECTED: 611 FT  
 QUANTITY REJECTED: 0

THICKNESS ORDERED: .500X.520 W.035  
 THICKNESS RECEIVED: .500X.520 W.035  
 SHEET SIZE ORDERED: ---  
 SHEET SIZE RECEIVED: ---

| DESCRIPTION  | NCR<br>(Check<br>Y/N)                 | COMMENTS          |
|--|---------------------------------------|-------------------|
| SURFACE DAMAGE                                     | Y <input checked="" type="checkbox"/> |                   |
| CORRECT FINISH                                     | <input checked="" type="checkbox"/> N |                   |
| CORROSION  | Y <input checked="" type="checkbox"/> |                   |
| CORRECT GRAIN DIRECTION                            | <input checked="" type="checkbox"/> N |                   |
| CORRECT MATERIAL PER M-DRAWING                     | <input checked="" type="checkbox"/> N | <u>MIL-T-6836</u> |
| CORRECT THICKNESS                                  | <input checked="" type="checkbox"/> N |                   |
| PHOTO REQUIRED                                     | Y <input checked="" type="checkbox"/> |                   |
| CORRECT REF # TO LINK CERT                         | <input checked="" type="checkbox"/> N | <u>WIT 25537</u>  |
| CORRECT MATERIAL IDENTIFICATION                    | <input checked="" type="checkbox"/> N |                   |
| CORRECT M# ON THE MATERIAL                         | <input checked="" type="checkbox"/> N |                   |
| DOES THIS MATERIAL REQUIRE<br>ENGINEERING SIGN OFF | Y <input checked="" type="checkbox"/> |                   |
| DOES THIS REQUIRE AN<br>EXTRUSION REPORT           | Y <input checked="" type="checkbox"/> |                   |

| CUT SAMPLE PIECE OF MATERIAL AND PERFORM A HARDNESS CHECK.<br>RECORD RESULTS BELOW |     |     |       |       |         |
|--|-----|-----|-------|-------|---------|
|  | HRC | HRB | DUR A | DUR D | WEBSTER |
| TYPE OF MATERIAL   |     |     |       |       |         |
| SIZE OF TEST SAMPLE  |     |     |       |       |         |
| HARDNESS / DUROMETER READING   |     |     |       |       |         |

*testers located in the Quality Office*

|                          |                      |                                   |  |
|--------------------------|----------------------|-----------------------------------|--|
| QC 13 INSPECTION         |                      | ENGINEERING SIGNOFF (if required) |  |
| INSPECTED BY: _____      | SIGNED OFF BY: _____ |                                   |  |
| DATE: <u>MAR 04 2020</u> | DATE: _____          |                                   |  |

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in

LIME1

M4130NTS0.500W.035

10413045882

**DART**

|                  |                |  |                        |
|------------------|----------------|--|------------------------|
| DESIGN<br>DH     | DRAWN BY<br>DH | <b>DART AEROSPACE LTD</b><br>HAWKESBURY, ONTARIO, CANADA |                        |
| CHECKED<br>#     | APPROVED<br>#  | DRAWING NO.<br>M4130N-TS                                 | REV. A<br>SHEET 1 OF 1 |
| DATE<br>05.02.09 |                | TITLE<br>4130N SQUARE TUBING                             | SCALE<br>NTS           |
| A                | 05.02.09       | NEW ISSUE  |                        |

PURCHASE MATERIAL:

AISI 4130N STEEL SQUARE TUBING PER ONE OF  
THE FOLLOWING SPEC'S: MIL-T-6736, AMS 6371,  
6360, 6361, 6362, 6373 OR 6374

PART NUMBER:

M4130N-TS | A.AAA | W | .TTT |

WHERE A.AAA = WIDTH IN INCHES  
TTT = WALL THICKNESS IN INCHES

EXAMPLE: 0.50" X 0.035" WALL = M4130N-TS0.500W.035

RELEASED

Copyright © 2005 by DART AEROSPACE LTD

THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.





**PLYMOUTH TUBE CO.**

4209 E. 15th St. Detroit, MI 48210  
Phone (313) 773-1215 Fax (313) 773-1216

TRUST YOUR SOURCE, ACCEPT NO SUBSTITUTIONS

# PRODUCT CERTIFICATION

SALES ORDER - LINE / RLS

179657 - 4 / 0

## SHIP TO

Factory Steel & Metal Supply C  
14020 Oakland Avenue  
Detroit, MI 48203  
USA

WORK ORDER 023914

HEAT NUMBER 25537

MELT SOURCE Timken Steel - Melt/Mfg. USA

PCS/HEAT

0

| CUSTOMER P.O.  | CUSTOMER PART | QUANTITY     | LADING NO   | CERT ID / REV | CERT DATE      |                |     |     |      |     |      |      |      |
|--|---------------|--------------|-------------|---------------|----------------|----------------|-----|-----|------|-----|------|------|------|
| 3999   | SQ-N12035     |              |             |               |                |                |     |     |      |     |      |      |      |
| <b>PART DESCRIPTION</b> SHSQ0500035J200<br>***** Square OD *****<br>Side1: 0.5000 Max:0.5100 Min:0.4900<br>Side2: 0.5000 Max:0.5100 Min:0.4900<br>Wall: 0.0350 Max:0.0380 Min:0.0320<br>Length: 10.6352 20<br>Spec: (Mil-T 6736B) Seamless Aircraft<br>Grade: 4340<br>Anneal: Cond N   |               |              |             |               |                |                |     |     |      |     |      |      |      |
| <b>CERTIFICATION REQUIREMENTS</b><br>FAR BAA (FAR 52.225-1 Buy America Act Supplies), DFARS 252.225-7001 Buy America Act & Bal. of Payments Program FAR TAA (FAR 52.225-5 Trade Agreements) Paragraph 107.6 This material was produced in accordance with the requirements of ASTM A-459. The Grain size is determined and reported by the raw material supplier in accordance to ASTM E-112. This raw material was magnetic particle inspected by the raw material supplier in accordance to AMS 2640J and/or ASTM E-1444, and rated as Frequency, and Severity to AMS 2301, latest revision. Yield is determined by using the 0.2% offset method. Additional Specifications - AWS-T 6736B, 6360P & 6371L. Material produced in accordance to ASTM A-619-17. Jominy results: J(5/16")=38 J(8/16")=31. |               |              |             |               |                |                |     |     |      |     |      |      |      |
| <b>Chemical Analysis</b>   |               |              |             |               |                |                |     |     |      |     |      |      |      |
| C  | Mn            | P            | S           | Si            | Al             | Cr             | Mo  | Ni  | Pb   | Cu  | V    | Ti   | Sn   |
| .30  | .56           | .008         | .005        | .29           | .025           | 1.02           | .20 | .13 | .000 | .18 | .009 | .003 | .009 |
| <b>Physical Properties</b>   |               |              |             |               |                |                |     |     |      |     |      |      |      |
| Frag.  | Severity      | Grain Size   |             |               |                |                |     |     |      |     |      |      |      |
| .000   | .000          | 7            |             |               |                |                |     |     |      |     |      |      |      |
| <b>Mechanical Properties</b>   |               |              |             |               |                |                |     |     |      |     |      |      |      |
| <b>TEST</b>  | <b>UNITS</b>  | <b>TESTS</b> | <b>HIGH</b> | <b>LOW</b>    | <b>AVERAGE</b> | <b>STD-DEV</b> |     |     |      |     |      |      |      |
| Tensile  | Psi           | 6            | 121110      | 115340        | 118173         | 2536           |     |     |      |     |      |      |      |
| Yield  | Psi           | 6            | 115370      | 108700        | 112526         | 2436           |     |     |      |     |      |      |      |
| Elongation   | %             | 6            | 17          | 17            | 17             | 0              |     |     |      |     |      |      |      |
| Rockwell C   | Rc            | 6            | 22          | 22            | 22             | 0              |     |     |      |     |      |      |      |
| <b>TEST</b>  | <b>RESULT</b> |              |             |               |                |                |     |     |      |     |      |      |      |
| Decarb/OD  | Pass          |              |             |               |                |                |     |     |      |     |      |      |      |
| Total ID/OD decarb   | Pass          |              |             |               |                |                |     |     |      |     |      |      |      |

I certify that the results are a true and correct copy of the records prepared and maintained by Plymouth Tube Company, Streator in compliance with the requirements of the cited specification. Chemistry is as reported by the Steel supplier. This test report cannot be reproduced or distributed except in full without the written permission of Plymouth Tube.

*James J. Russell*

Quality Assurance





**PLYMOUTH TUBE CO.**

Phone (800) 368-1515 Fax (313) 482-7343

TRUST YOUR SOURCE. ACCEPT NO SUBSTITUTIONS.

# PRODUCT CERTIFICATION

SALES ORDER - LINE / RLS

179657-1 / 0

SHP TO

Factory Steel & Metal Supply C  
14020 Oakland Avenue  
Detroit, MI 48203  
USA

WORK ORDER 03301

HEAT NUMBER 25337

MELT SOURCE Written Steel - Melt/Mfg. USA

PCS/HEAT 0

|  |                            |                   |                    |                   |                       |
|--|----------------------------|-------------------|--------------------|-------------------|-----------------------|
| CUSTOMER P.O.<br>3999  | CUSTOMER PART<br>SQ-N12035 | QUANTITY          | LOADING NO         | CERT ID / REV     | CERT DATE             |
| PART DESCRIPTION<br>SHSQ0500035J200  |                            |                   |                    |                   |                       |
| <u>Additional Specification(s)</u>   |                            |                   |                    |                   |                       |
| <u>TEST</u><br>Brinell   | <u>UNITS</u><br>Brinell    | <u>TESTS</u><br>9 | <u>HIGH</u><br>251 | <u>LOW</u><br>197 | <u>AVERAGE</u><br>225 |
|  |                            |                   |                    |                   | <u>STD-DEV</u><br>27  |
| <p>This test report data is for the heat Chemistry Stated above.</p> <p>The material in this test report is:</p> <ol style="list-style-type: none"> <li>1) Drawn in the USA</li> <li>2) Free from Polybrominated Biphenyls (PBB), Polybrominated Diphenyl Ethers (PBDE), and Mercury contamination.</li> <li>3) NAFTA compliant.</li> </ol> <p style="text-align: right;">End of Certification</p> |                            |                   |                    |                   |                       |

I certify that the results are a true and correct copy of the records prepared and maintained by Plymouth Tube Company, Streator in compliance with the requirements of the cited specification. Chemistry is as reported by the Steel supplier. This test report cannot be reproduced or distributed except in full without the written permission of Plymouth Tube.

*Janice Beresoff*  
Quality Assurance

Entered: \_\_\_\_\_ Date: \_\_\_\_\_



## WORK ORDER NON-CONFORMANCE / ROUTE UPDATE

NCR No. \_\_\_\_\_

Route update only ☐

|   |   |   |  |                        |  |
|---|---|---|--|------------------------|--|
| Job: _____<br><br>Part No. _____  | <b>DISPOSITION</b><br><br>Rework <input type="checkbox"/><br>Scrap <input type="checkbox"/><br>Use-as-is <input type="checkbox"/> | <b>DEPARTMENT/PROCESS</b><br><br><div style="display: flex; justify-content: space-between;"> <div>           Skid-tube <input type="checkbox"/><br/>           Machining <input type="checkbox"/><br/>           Large Fab <input type="checkbox"/> </div> <div>           Cross tube <input type="checkbox"/><br/>           Small Fab <input type="checkbox"/><br/>           Finishing <input type="checkbox"/> </div> <div>           Eng. (Non-AW) <input type="checkbox"/><br/>           Prod. Eng. Coord. <input type="checkbox"/><br/>           Rec/Store/Packaging <input type="checkbox"/> </div> <div>           Engineering <input type="checkbox"/><br/>           Water Jet <input type="checkbox"/><br/>           Supplier <input type="checkbox"/><br/>           Quality <input type="checkbox"/> </div> </div>  |  |                        |  |
| Date : _____  | Sequence #: _____   | QTY Affected : _____  |  | MRB (QSI042)           |  |
| Description Work Order Deviation  |   | Disposition   |  | Completed By           |  |
|   |   |   |  | Lead hand / Supervisor |  |
|   |   |   |  |                        |  |
|   |   |   |  | QC / QA Coordinator    |  |
| <b>Root Cause</b><br><br><div style="display: flex; flex-direction: column;"> <div>Operator <input type="checkbox"/></div> <div>Manufacturing Process <input type="checkbox"/></div> <div>Equip/Tooling <input type="checkbox"/></div> <div>Handling/Presservation <input type="checkbox"/></div> <div>Material <input type="checkbox"/></div> <div>Product Improvement <input type="checkbox"/></div> <div>Process Improvement <input type="checkbox"/></div> <div>Human Factors <input type="checkbox"/></div> </div> |   | <b>FAULT CATEGORY</b><br><br><div style="display: flex; flex-wrap: wrap;"> <div style="width: 50%;"> <input type="checkbox"/> Pressure/Forced<br/> <input type="checkbox"/> Bending<br/> <input type="checkbox"/> Crushing<br/> <input type="checkbox"/> Cracks<br/> <input type="checkbox"/> Crimp/Kink/Ripple/Wave/Twist<br/> <input type="checkbox"/> Marks/Chatter<br/> <input type="checkbox"/> Mislabeled         </div> <div style="width: 50%;"> <input type="checkbox"/> Contamination<br/> <input type="checkbox"/> Misaligned/off center<br/> <input type="checkbox"/> BOM/Route<br/> <input type="checkbox"/> Broken/Damage/Defect<br/> <input type="checkbox"/> Incomplete/Unclear Instructions<br/> <input type="checkbox"/> Drill Holes<br/> <input type="checkbox"/> Fit/Function         </div> <div style="width: 50%;"> <input type="checkbox"/> Power Loss/Surge<br/> <input type="checkbox"/> Folio/Program<br/> <input type="checkbox"/> Grain Direction<br/> <input type="checkbox"/> Weld<br/> <input type="checkbox"/> Wrong Stock Pulled<br/> <input type="checkbox"/> Out of Sequence<br/> <input type="checkbox"/> Off-set/Set-up         </div> <div style="width: 50%;"> <input type="checkbox"/> Positioned Wrong<br/> <input type="checkbox"/> Outside Tolerance<br/> <input type="checkbox"/> Drawing<br/> <input type="checkbox"/> Finish<br/> <input type="checkbox"/> Part Lost/Missing<br/> <input type="checkbox"/> Misread         </div> </div> |  |                        |  |
| Other/Details:  |   |   |  |                        |  |